

**Title 7 DNREC**  
**1100 Air Quality Management Section**

**1138 EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES**

12/11/12

**17.0 Emission Standards for Hazardous Air Pollutants for Area Source Prepared Feeds Manufacturing Facilities**

**17.1 Applicability.**

- 17.1.1 The provisions of 17.0 of this regulation apply to each prepared feeds manufacturing facility that is an area source of hazardous air pollutant (HAP) emissions and uses a material containing chromium or a material containing manganese.
- 17.1.2 An area source of HAP emissions is a source of hazardous air pollutants (HAPs) that is not a major source of HAP emissions, is not located at a major source of HAP emissions, and is not part of a major source of HAP emissions. A major source of HAP emissions is any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in aggregate, 10 tons per year or more of any HAP or 25 tons per year or more of any combination of HAPs.
- 17.1.3 The provisions of 17.0 of this regulation apply to each new and existing prepared feeds manufacturing affected source. A prepared feeds manufacturing affected source is the collection of all equipment and activities necessary to produce animal feed from the point in the process where a material containing chromium or a material containing manganese is added, to the point where the finished animal feed product leaves the facility. This includes, but is not limited to, areas where a material containing chromium or a material containing manganese is stored, areas where a material containing chromium or a material containing manganese is temporarily stored prior to addition to the feed at the mixer, mixing, and grinding processes, pelleting and pellet cooling processes, packing and bagging processes, crumblers and screens, bulk loading operations, and all conveyors and other equipment that transfer the feed materials throughout the manufacturing facility.
  - 17.1.3.1 A collection of equipment and activities necessary to produce animal feed at a prepared feeds manufacturing facility becomes an affected source when the owner or operator commences using a material containing chromium or a material containing manganese.
  - 17.1.3.2 A collection of equipment and activities necessary to produce animal feed at a prepared feeds manufacturing facility ceases to be an affected source when the facility stops using materials containing chromium and materials containing manganese and submits a notification of change of status to the Department in accordance with 17.7.3 of this regulation.
- 17.1.4 A prepared feeds manufacturing affected source is an existing affected source if the owner or operator commenced construction or reconstruction on or before July 27, 2009.
- 17.1.5 A prepared feeds manufacturing affected source is a new affected source if the owner or operator commenced construction or reconstruction after July 27, 2009.

17.1.6 The facilities identified in 17.1.6.1 and 17.1.6.2 of this regulation are exempt from the provisions of 17.0 of this regulation.

17.1.6.1 Prepared feeds manufacturing facilities that do not add any materials containing chromium or any materials containing manganese to any product manufactured at the facility.

17.1.6.2 Prepared feeds manufacturing operations conducted in research or laboratory facilities.

17.1.7 The owner or operator of an area source subject to 17.0 of this regulation is exempt from the obligation to obtain a Title V operating permit under 7 **DE Admin Code** 1130 of State of Delaware “Regulations Governing the Control of Air Pollution”, if the owner or operator is not required to obtain a Title V operating permit under 3.1 of 7 **DE Admin Code** 1130 for a reason other than the owner or operator’s status as an area source under 17.0. Notwithstanding the previous sentence, the owner or operator shall continue to comply with the provisions of 17.0.

## 17.2 Definitions.

Unless defined below, all terms in 17.0 of this regulation have the meaning given them in the Act or in 3.2 of this regulation.

**“Animal feed”** includes: dehydrated alfalfa meal; alfalfa prepared as feed for animals; cubed alfalfa; chopped, crushed, or ground barley feed; prepared bird feed; blended animal feed; bone meal prepared as feed for animals and fowls; cattle feeds, supplements, concentrates, and premixes; prepared chicken feeds; cattle feed citrus pulp; complete livestock feed; custom milled animal feed; dairy cattle feeds supplements, concentrates, and premixes; earthworm food and bedding; animal feed concentrates; animal feed premixes; animal feed supplements; prepared animal feeds; specialty animal (e.g., guinea pig, mice, mink) feeds; fish food for feeding fish; custom ground grains for animal feed; cubed hay; kelp meal and pellets animal feed; laboratory animal feed; livestock feeds, supplements, concentrates and premixes; alfalfa meal; livestock micro and macro premixes; mineral feed supplements; animal mineral supplements; pet food; poultry feeds, supplements, and concentrates; rabbit food; shell crushed and ground animal feed; swine feed; swine feed supplements, concentrates, and premixes; and prepared turkey feeds. Feed products produced for dogs and cats are not considered animal feed for the purposes of 17.0 of this regulation.

**“Average daily feed production level”** means the average amount of animal feed products produced each day over an annual period. For existing sources, the initial average daily feed production level is based on the average daily feed production level determination for the period of January 5, 2011 through January 4, 2012. For new sources, the initial average daily feed production level is based on the design rate. Subsequently, average daily feed production levels are determined annually and are based on the amount of animal feed products produced in a calendar year divided by the number of days in which the production processes were in operation.

**“Cyclone”** means a mechanically aided collector that uses inertia to separate particulate matter from the gas stream as it spirals through the cyclone.

**“Deviation”** means any instance in which an affected source, subject to 17.0 of this regulation, or an owner or operator of such a source fails to meet any applicable requirement or obligation established in 17.0.

**“Material containing chromium”** means a material that contains chromium (Cr, atomic number 24) in amounts greater than or equal to 0.1% by weight.

**“Material containing manganese”** means a material that contains manganese (Mn, atomic number 25) in amounts greater than or equal to 1.0% by weight.

**“Pelleting operations”** means all operations that make pelleted animal feed, including but not limited to, steam conditioning, die-casting, drying, cooling, crumbling, and granulation.

**“Prepared feeds manufacturing facility”** means a facility that is primarily engaged in manufacturing animal feed. A facility is primarily engaged in manufacturing animal feed if the production of animal feed comprises greater than 50% of the total production of the facility on an annual basis. Facilities primarily engaged in raising or feeding animals are not prepared feed manufacturing facilities. Facilities engaged in the growing of agricultural crops that are used in the manufacturing of animal feed are not considered prepared feeds manufacturing facilities.

**“Research and laboratory facility”** means any stationary source whose primary purpose is to conduct research and development into new processes and products, where such source is operated under the close supervision of technically trained personnel and is not engaged in the manufacture of products for commercial sale in commerce, except in a de minimis manner.

### 17.3 Compliance dates.

- 17.3.1 The owner or operator of an existing affected source shall be in compliance with the applicable provisions of 17.0 of this regulation by no later than December 11, 2012.
- 17.3.2 The owner or operator of a new affected source shall be in compliance with the applicable provisions of 17.0 of this regulation by December 11, 2012 or upon startup of the affected source, whichever is later.
- 17.3.3 If a prepared feeds manufacturing facility becomes an affected source in accordance with 17.1.3.1 of this regulation after the applicable compliance date in 17.3.1 or 17.3.2 of this regulation, the owner or operator shall be in compliance with the applicable provisions of 17.0 of this regulation by the date that the owner or operator commences using a material containing chromium or a material containing manganese.
- 17.3.4 If the average daily feed production level exceeds 50 tons per day for a calendar year for a facility not previously required to comply with the requirements in 17.4.5 or 17.4.6 of this regulation to install and operate a cyclone to control emissions from pelleting operations, the owner or operator shall be in compliance with 17.4.5 or 17.4.6, whichever is applicable, and all associated requirements by July 1 of the year following the calendar year in which the average daily feed production level exceeded 50 tons per day. Once an owner or operator has become subject to the requirements in 17.4.5 or 17.4.6 by exceeding 50 tons per day average daily feed production level, the owner or operator shall remain subject to the requirements in 17.4.5 or 17.4.6, whichever is applicable, and all associated requirements, even if the average daily feed production level later falls to 50 tons per day or less.

### 17.4 Management practices and standards.

On and after the applicable compliance date as defined in 17.3 of this regulation, the owner or operator of an affected source subject to the provisions of 17.0 of this regulation shall be in compliance with the applicable management practices and standards in 17.4.1 through 17.4.4 of this regulation at all times. For pelleting

operations at new prepared feeds manufacturing facilities with an average daily feed production level exceeding 50 tons per day, the owner or operator shall also be in compliance with the requirements in 17.4.5 of this regulation at all times. For pelleting operations at existing prepared feeds manufacturing facilities with an average daily feed production level exceeding 50 tons per day, the owner or operator shall also be in compliance with the requirements in 17.4.6 of this regulation at all times.

- 17.4.1 In all areas of the affected source where materials containing chromium or materials containing manganese are stored, used, or handled, the owner or operator shall be in compliance with the management practices in 17.4.1.1 and 17.4.1.2 of this regulation.
  - 17.4.1.1 The owner or operator shall perform housekeeping measures to minimize excess dust. These measures shall include, but not be limited to, the practices specified in 17.4.1.1.1 through 17.4.1.1.3 of this regulation.
    - 17.4.1.1.1 The owner or operator shall use either an industrial vacuum system or manual sweeping to reduce the amount of dust.
    - 17.4.1.1.2 At least once per month, the owner or operator shall remove dust from walls, ledges, and equipment using low pressure air or by other means and, then, sweep or vacuum the area.
    - 17.4.1.1.3 The owner or operator shall keep exterior doors in the immediate affected areas shut except during normal ingress and egress, as practicable. The requirement of 17.4.1.1.3 of this regulation does not apply to areas where finished product is stored in closed containers, and no other materials containing chromium or materials containing manganese are present.
  - 17.4.1.2 The owner or operator shall maintain and operate all process equipment in accordance with manufacturer's specifications and in a manner to minimize dust creation.
- 17.4.2 The owner or operator shall store any raw materials containing chromium or raw materials containing manganese in closed containers.
- 17.4.3 The mixer where materials containing chromium or materials containing manganese are added shall be covered at all times when mixing is occurring, except when the materials are being added to the mixer. Materials containing chromium or materials containing manganese shall be added to the mixer in a manner that minimizes dust creation.
- 17.4.4 For the bulk loading process where materials containing chromium or materials containing manganese are loaded into trucks or railcars, the owner or operator shall lessen fugitive emissions by reducing the distance between the loadout spout and the vehicle being loaded by being in compliance with either 17.4.4.1 or 17.4.4.2 of this regulation.
  - 17.4.4.1 Use a device of any kind at the bulk loadout spout that minimizes the distance to the vehicle being loaded.
  - 17.4.4.2 Use any other means to minimize the distance between the loadout spout and the vehicle being loaded.
- 17.4.5 For the pelleting operations at new prepared feeds manufacturing facilities with an average daily feed production level exceeding 50 tons per day, the owner or operator shall capture emissions and route them to a cyclone designed to reduce emissions of particulate matter by 95% or

greater. The owner or operator shall also comply with the provisions in 17.4.5.1 through 17.4.5.3 of this regulation.

17.4.5.1 The owner or operator shall demonstrate that the cyclone is designed to reduce emissions of particulate matter by 95% or greater using one of the methods specified in 17.4.5.1.1 through 17.4.5.1.3 of this regulation.

17.4.5.1.1 Manufacturer's specifications.

17.4.5.1.2 Certification by a professional engineer or responsible official.

17.4.5.1.3 A performance test conducted in accordance with 17.6 of this regulation.

17.4.5.2 The owner or operator shall establish an inlet flow rate, inlet velocity, pressure drop, or fan amperage range that represents proper operation of the cyclone in accordance with the applicable requirement in 17.4.5.2.1, 17.4.5.2.2, or 17.4.5.2.3 of this regulation.

17.4.5.2.1 If the owner or operator demonstrates the cyclone design efficiency using manufacturer's specifications in accordance with 17.4.5.1.1 of this regulation, the inlet flow rate, inlet velocity, pressure drop, or fan amperage range that represents proper operation of the cyclone shall be provided by the manufacturer.

17.4.5.2.2 If the owner or operator demonstrates the cyclone design efficiency using certification by a professional engineer or responsible official in accordance with 17.4.5.1.2 of this regulation, this certification shall include calculations to establish an inlet flow rate, inlet velocity, pressure drop, or fan amperage range that represents proper operation of the cyclone.

17.4.5.2.3 If the owner or operator demonstrates the cyclone design efficiency using a performance test in accordance with 17.4.5.1.3 of this regulation, the owner or operator shall monitor the inlet flow rate, inlet velocity, pressure drop, or fan amperage during the performance test and establish a range that represents proper operation of the cyclone based on the data obtained during the performance test.

17.4.5.3 The owner or operator shall maintain and operate the cyclone in accordance with manufacturer's specifications. If manufacturer's specifications are not available, the owner or operator shall develop and follow standard maintenance and operating procedures that ensure proper operation of the cyclone.

17.4.6 For the pelleting operations at existing prepared feeds manufacturing facilities with an average daily feed production level exceeding 50 tons per day, the owner or operator shall capture emissions and route them to a cyclone. The cyclone shall be operated and maintained in accordance with good air pollution control practices and the manufacturer's specifications and operating instructions, if available. If the manufacturer's specifications and operating instructions are not available, the owner or operator shall develop and follow standard operating procedures that ensure proper operation and maintenance of the cyclone.

17.5 Monitoring requirements.

- 17.5.1 If the owner or operator of an affected source is required by 17.4.4 of this regulation to lessen fugitive emissions by using a device or any other means to minimize the distance between the loadout spout and the vehicle being loaded, the owner or operator shall perform monthly inspections of each device or other means used to ensure it is in proper working condition. The owner or operator shall record the results of each inspection in accordance with 17.9.1.3 of this regulation.
- 17.5.2 If the owner or operator of an affected source is required by 17.4.5 or 17.4.6 of this regulation to install and operate a cyclone to control emissions from pelleting operations, the owner or operator shall be in compliance with the inspection and monitoring requirements in 17.5.2.1 and either 17.5.2.2 or 17.5.2.3 of this regulation, whichever is applicable.
- 17.5.2.1 The owner or operator shall perform quarterly inspections of the cyclone for corrosion, erosion, or any other damage that could result in air in-leakage. The owner or operator shall also record the results of each inspection in accordance with 17.9.1.4.4 or 17.9.1.5.1 of this regulation, whichever is applicable.
- 17.5.2.2 The owner or operator of a new source shall monitor inlet flow rate, inlet velocity, pressure drop, or fan amperage at least once per day when the pelleting process is in operation. The owner or operator shall also record the inlet flow rate, inlet velocity, pressure drop, or fan amperage in accordance with 17.9.1.4 of this regulation.
- 17.5.2.3 The owner or operator of an existing source shall perform a weekly visual inspection of the operating cyclone to ensure it is being operated and maintained consistent with good air pollution control practices and the manufacturer's specifications and operating instructions. The owner or operator shall also record the results of the weekly visual inspections in accordance with 17.9.1.5.2 of this regulation.

## 17.6 Test method and procedures.

- 17.6.1 If the owner or operator is demonstrating that the cyclone required by 17.4.5 of this regulation is designed to reduce the emissions of particulate matter by 95% or greater by the performance test option in 17.4.5.1.3 of this regulation, the owner or operator shall conduct a performance test in accordance with 17.6.2 of this regulation and calculate the particulate matter reduction in accordance with 17.6.3 of this regulation.
- 17.6.2 The owner or operator shall use Method 5 in Appendix A of 40 CFR Part 60 to determine the particulate matter mass rate at the inlet and outlet of the cyclone. The owner or operator shall conduct at least three runs at the cyclone inlet and three runs at the cyclone outlet. Each run shall have a sampling time of at least 60 minutes and a sample volume of at least 0.85 dscm (30 dscf).
- 17.6.3 The owner or operator shall calculate the particulate matter reduction, PM RED, using equation 17-1.

$$\text{PM RED} = ((M_{\text{INLET}} - M_{\text{OUTLET}}) / (M_{\text{INLET}})) \times 100 \quad (17-1)$$

where:

PM RED = particulate matter reduction, percent.

$M_{\text{INLET}}$  = mass rate of particulate matter at the inlet of the cyclone, dry basis, corrected to standard conditions, g/min.

$M_{\text{OUTLET}}$  = mass rate of particulate matter at the outlet of the cyclone, dry basis, corrected to standard conditions, g/min.

## 17.7 Notification requirements.

The owner or operator of an affected source shall submit the notifications specified in 17.7.1, 17.7.2, and, if applicable, 17.7.3 of this regulation.

17.7.1 Initial notification. The owner or operator of an existing affected source shall submit an initial notification to the Department no later than December 11, 2012. The owner or operator of a new or reconstructed affected source shall submit an initial notification to the Department no later than December 11, 2012 or 120 days after startup, whichever is later. The owner or operator of facility that commences to use a material containing chromium or a material containing manganese after the compliance dates in 17.3.1 or 17.3.2 of this regulation shall submit an initial notification to the Department no later than 120 days after the date that the owner or operator commenced using a material containing chromium or a material containing manganese. The initial notification shall include the information specified in 17.7.1.1 through 17.7.1.5 of this regulation.

17.7.1.1 The name and address (i.e., physical location) of the affected source subject to the provisions of 17.0 of this regulation.

17.7.1.2 The address that the compliance records are kept, if different than the physical location.

17.7.1.3 The name, address, phone number and e-mail address of the owner or operator of the affected source.

17.7.1.4 An identification of the relevant standard (i.e., Section 17.0 of Regulation 1138).

17.7.1.5 A brief description of the prepared feeds manufacturing affected source.

17.7.2 Notification of compliance status. The owner or operator of an existing affected source shall submit a notification of compliance status to the Department in accordance with 3.9.8 of this regulation no later than December 11, 2012. The owner or operator of a new affected source shall submit a notification of compliance status to the Department no later than December 11, 2012 or within 120 days of initial startup, whichever is later. The owner or operator of a source that becomes an affected source in accordance with 17.1.3.1 of this regulation after the applicable compliance date in 17.3.1 or 17.3.2 of this regulation shall submit a notification of compliance status to the Department within 120 days of the date that the owner or operator commenced using materials containing chromium or materials containing manganese. The notification of compliance status shall include the information specified in 17.7.2.1 and 17.7.2.2 of this regulation and the information specified in 17.7.2.3 through 17.7.2.5 of this regulation, if applicable.

17.7.2.1 The name and address (i.e., physical location) of the affected source.

- 17.7.2.2 A statement by a responsible official with that official's name, title, phone number, e-mail address and signature, certifying the truth, accuracy, and completeness of the notification of compliance status and a statement of whether the source has complied with all the relevant standards and other requirements of 17.0 of this regulation.
- 17.7.2.3 The owner or operator of a new source required by 17.4.5 of this regulation to install and operate a cyclone to control emissions from pelleting operations shall provide the inlet flow rate, inlet velocity, pressure drop, or fan amperage range that constitutes proper operation of the cyclone as determined in accordance with 17.4.5.2 of this regulation.
- 17.7.2.4 The owner or operator of an existing source required by 17.4.6 of this regulation to install and operate a cyclone to control emissions from pelleting operations shall provide documentation of what constitutes proper operation of the cyclone as determined in accordance with 17.4.6 of this regulation.
- 17.7.2.5 The owner or operator of an affected source that is not subject to a requirement in 17.4.5 or 17.4.6 of this regulation to install and operate a cyclone to control emissions from pelleting operations because the initial average daily feed production level was 50 tons per day or less shall provide documentation of the initial daily pelleting production level determination.
- 17.7.3 Notification of change of status. If the owner or operator ceases to use materials containing chromium and materials containing manganese after December 11, 2012, the owner or operator shall submit a notification of change of status to the Department as soon as practicable after ceasing to use materials containing chromium and materials containing manganese in accordance with 17.1.3.2 of this regulation. The notification of change of status shall include the information specified in 17.7.3.1 and 17.7.3.2 of this regulation.
  - 17.7.3.1 The name and address (i.e., physical location) of the affected source.
  - 17.7.3.2 A statement by a responsible official indicating that the prepared feeds manufacturing facility no longer uses either materials containing chromium or materials containing manganese. This statement should also include the effective date for the termination of uses of materials containing chromium and materials containing manganese, and the responsible official's name, title, phone number, e-mail address and signature.

## 17.8 Reporting requirements.

By March 1 of each year, the owner or operator of an affected source shall prepare an annual compliance certification report for the previous calendar year containing the information specified in 17.8.1 through 17.8.6 of this regulation. If a deviation occurred during the previous calendar year as reported in accordance with 17.8.3, 17.8.4, or 17.8.5 of this regulation or if a change occurred under 17.8.6 of this regulation, the owner or operator shall submit the annual compliance certification report for the previous calendar year to the Department by March 1.

- 17.8.1 The name and address (i.e., physical location) of the affected source.
- 17.8.2 A statement by a responsible official with that official's name, title, phone number, e-mail address and signature, certifying the truth, accuracy, and completeness of the annual compliance certification report and a statement of whether the source has complied with all the relevant standards and other requirements of 17.0 of this regulation.



- 17.8.3 If the source was not in compliance with the management practices and standards in 17.4.1 through 17.4.4 of this regulation and the applicable inspection requirements in 17.5.2.1 and 17.5.2.3 of this regulation at all times during the previous calendar year, the owner or operator shall include a description of each deviation from the applicable requirements, the time periods during which the deviations occurred, and the corrective actions taken.
- 17.8.4 The owner or operator of a new source that is subject to 17.4.5 of this regulation shall identify all instances during the previous calendar year when the daily inlet flow rate, inlet velocity, pressure drop, or fan amperage was found to be outside the operating range that constitutes proper operation of the cyclone, as reported in 17.7.2.3 of this regulation. The owner or operator shall include a description of each deviation from proper operation, the time periods during which the deviation occurred, and the corrective actions taken.
- 17.8.5 The owner or operator of an existing source that is subject to 17.4.6 of this regulation shall identify all instances during the previous calendar year when the cyclone was found not operating properly as determined in accordance with 17.4.6. The owner or operator shall include a description of each deviation from proper operation, the time periods during which the deviation occurred, and the corrective actions taken.
- 17.8.6 The owner or operator of an affected source that is not subject to a requirement in 17.4.5 or 17.4.6 of this regulation to install and operate a cyclone to control emissions from pelleting operations because the average daily feed production level was 50 tons per day or less shall provide notification if the average daily feed production level for the previous calendar year exceeded 50 tons per day.
- 17.8.7 [Reserved].

## 17.9 Recordkeeping requirements.

- 17.9.1 The owner or operator shall maintain the records specified in 17.9.1.1 through 17.9.1.6 of this regulation.
- 17.9.1.1 A copy of each notification that the owner or operator submitted to comply with 17.0 of this regulation, including all documentation supporting any initial notification, notification of compliance status, or notification of change of status that was submitted in accordance with the requirements in 17.7 of this regulation.
- 17.9.1.2 A copy of each annual compliance certification report prepared to comply with 17.0 of this regulation, including all documentation associated with each deviation or the calculation, if applicable, of the average daily feed production level that was prepared in accordance with the requirements in 17.8.6 of this regulation.
- 17.9.1.3 For each device or any other means to minimize the distance between the loadout spout and the vehicle being loaded used to comply with the requirements in 17.4.4 of this regulation, the records of all inspections conducted to comply with 17.5.1 of this regulation, including the information specified in 17.9.1.3.1 through 17.9.1.3.3 of this regulation.

17.9.1.3.1 The date, place, and time of each inspection.

17.9.1.3.2 The name of the person performing the inspection.

17.9.1.3.3 Results of the inspection and, if applicable, the date, time, corrective action taken, and duration of the corrective action period from the time the inspection indicated a problem to the time of the indication that the device or any other means to minimize fugitive emissions was replaced or restored to proper operation.

17.9.1.4 The owner or operator of a new source that is subject to 17.4.5 of this regulation shall keep the records specified in 17.9.1.4.1 through 17.9.1.4.5 of this regulation.

17.9.1.4.1 If the owner or operator is using the manufacturer's specifications to demonstrate that the cyclone is designed to reduce the emissions of particulate matter by 95% or greater in accordance with 17.4.5.1.1 of this regulation, the records specified in 17.9.1.4.1.1 through 17.9.1.4.1.3 of this regulation.

17.9.1.4.1.1 Information from the manufacturer regarding the design efficiency of the cyclone.

17.9.1.4.1.2 The inlet flow rate, inlet velocity, pressure drop, or fan amperage range that represents proper operation of the cyclone.

17.9.1.4.1.3 The standard maintenance and operating procedures that ensures proper operation of the cyclone.

17.9.1.4.2 If the owner or operator is using the certification by a professional engineer or responsible official to demonstrate that the cyclone is designed to reduce the emissions of particulate matter by 95% or greater in accordance with 17.4.5.1.2 of this regulation, the records specified in 17.9.1.4.2.1 through 17.9.1.4.2.3 of this regulation.

17.9.1.4.2.1 Certification regarding the design efficiency of the cyclone, along with supporting information.

17.9.1.4.2.2 The inlet flow rate, inlet velocity, pressure drop, or fan amperage range that represents proper operation of the cyclone.

17.9.1.4.2.3 The standard maintenance and operating procedures that ensures proper operation of the cyclone.

17.9.1.4.3 If the owner or operator is using the results of a performance test to demonstrate that the cyclone is designed to reduce the emissions of particulate matter by 95% or greater in accordance with 17.4.5.1.3 of this regulation, the records specified in 17.9.1.4.3.1 through 17.9.1.4.3.3 of this regulation.

17.9.1.4.3.1 Results of the performance test conducted in accordance with 17.6 of this regulation.

17.9.1.4.3.2 The inlet flow rate, inlet velocity, pressure drop, or fan amperage range that represents proper operation of the cyclone.

17.9.1.4.3.3 The standard maintenance and operating procedures that ensures proper operation of the cyclone.

- 17.9.1.4.4 Records of all quarterly inspections conducted to comply with 17.5.2.1 of this regulation, including the information specified in 17.9.1.4.4.1 through 17.9.1.4.4.3 of this regulation.
- 17.9.1.4.4.1 The date, place, and time of each inspection.
- 17.9.1.4.4.2 The name of the person performing the inspection.
- 17.9.1.4.4.3 Results of the inspection and, if applicable, the date, time, corrective action taken, and duration of the corrective action period from the time the inspection indicated a problem to the time of the indication that the cyclone was restored to proper operation.
- 17.9.1.4.5 Records of the daily inlet flow rate, inlet velocity, pressure drop, or fan amperage measurements and, if applicable, the date, time, corrective action taken, and duration of the correction action period from the time the monitoring indicated a problem to the time of the indication that the cyclone was restored to proper operation.
- 17.9.1.5 The owner or operator of an existing source that is subject to 17.4.6 of this regulation shall keep the records in 17.9.1.5.1 and 17.9.1.5.2 of this regulation.
- 17.9.1.5.1 Records of all quarterly inspections conducted to comply with 17.5.2.1 of this regulation, including the information specified in 17.9.1.5.1.1 through 17.9.1.5.1.3 of this regulation.
- 17.9.1.5.1.1 The date, place, and time of each inspection.
- 17.9.1.5.1.2 The name of the person performing the inspection.
- 17.9.1.5.1.3 Results of the inspection and, if applicable, the date, time, corrective action taken, and duration of the corrective action period from the time the inspection indicated a problem to the time of the indication that the cyclone was restored to proper operation.
- 17.9.1.5.2 Records of all weekly visual inspections of the operating cyclone conducted to comply with 17.5.2.3 of this regulation, including the information specified in 17.9.1.5.2.1 through 17.9.1.5.2.3 of this regulation.
- 17.9.1.5.2.1 The date, place, and time of each inspection.
- 17.9.1.5.2.2 The name of the person performing the inspection.
- 17.9.1.5.2.3 Results of the inspection and, if applicable, the date, time, corrective action taken, and duration of the corrective action period from the time the inspection indicated a problem to the time of the indication that the cyclone was restored to proper operation.
- 17.9.1.6 The owner or operator of an affected source that is not subject to the requirement in 17.4.5 or 17.4.6 of this regulation to install and operate a cyclone to control emissions from pelleting operations because the average daily feed production level is 50 tons per day or less shall keep the feed production records used to determine the average daily feed production levels.

- 17.9.2 The owner or operator shall maintain files of all records and information in a form suitable and readily available for expeditious review, in accordance with 3.10.2.1 of this regulation.
- 17.9.3 As specified in 3.10.2.1 of this regulation, the owner or operator shall retain each record for five years following the date of each recorded action.
- 17.9.4 The owner or operator shall retain each record on site for at least two years after the date of each recorded action in accordance with 3.10.2.1 of this regulation. The owner or operator may retain the records off site for the remaining three years.

#### 17.10 Applicability of general provisions.

The owner or operator of an affected source shall be in compliance with the applicable provisions in 3.0 of this regulation that are also applicable to affected sources subject to 17.0 of this regulation, as specified in Table 17-1 of this regulation.

#### 17.11 [Reserved].

Table 17-1 - Applicability of 3.0 to 17.0 of this Regulation

General Provision Reference	Applies to 17.0	Comment
3.1.1.1	Yes	Additional terms defined in 17.2 of this regulation; when overlap between 3.0 and 17.0 of this regulation occurs, 17.0 takes precedence.
3.1.1.2 - 3.1.1.3	Yes	
3.1.1.4	Yes	17.0 of this regulation clarifies the applicability of each provision in 3.0 of this regulation to sources subject to 17.0.
3.1.1.5	No	Reserved.
3.1.1.6	Yes	
3.1.1.7 - 3.1.1.9	No	Reserved.
3.1.1.10 - 3.1.1.12	Yes	
3.1.1.13 - 3.1.1.14	No	Reserved.
3.1.2.1 - 3.1.2.3	Yes	Applicability of 17.0 of this regulation is also specified in 17.1 of this regulation.
3.1.3.1	Yes	17.0 of this regulation clarifies the applicability of each paragraph in 3.0 of this regulation to sources subject to 17.0.
3.1.3.2	Yes	17.1.7 of this regulation exempts area sources from the obligation to obtain Title V operating permits.
3.1.3.3 - 3.1.3.4	No	Reserved.
3.1.3.5	Yes	
3.1.4	No	Reserved.
3.1.5	Yes	17.1.7 of this regulation exempts area sources from the obligation to obtain Title V operating permits.

3.2	Yes	Additional terms defined in 17.2 of this regulation; when overlap between 3.0 and 17.0 of this regulation occurs, 17.0 takes precedence.
3.3	Yes	
3.4.1.1 - 3.4.1.2	Yes	
3.4.1.3 - 3.4.1.5	No	Reserved.
3.4.2 - 3.4.2.2	Yes	
3.4.2.3	No	Reserved.
3.4.3	Yes	
3.5.1 - 3.5.1.1	No	
3.5.1.2	Yes	
3.5.2 - 3.5.2.2	No	
3.5.2.3	No	Reserved.
3.5.2.4	No	
3.5.2.5	No	Reserved.
3.5.2.6	No	
3.5.3	No	Reserved.
3.5.4.1.1 - 3.5.4.1.2.8	No	
3.5.4.1.2.9	No	Reserved.
3.5.4.1.2.10 - 3.5.6.1.1	No	
3.5.6.1.2 - 3.5.6.1.4	No	Reserved.
3.5.6.2	No	
3.6.1 - 3.6.2.5	Yes	17.3 of this regulation specifies the compliance dates.
3.6.2.6	No	Reserved.
3.6.2.7	Yes	
3.6.3.1 - 3.6.3.2	Yes	17.3 of this regulation specifies the compliance dates.
3.6.3.3 - 3.6.3.4	No	Reserved.
3.6.3.5	Yes	
3.6.4	No	Reserved.
3.6.5.1	No	Standards apply at all times, including during startup, shutdown, and malfunction events.
3.6.5.2	No	Reserved.
3.6.5.3	No	Standards apply at all times, including during startup, shutdown, and malfunction events.
3.6.6.1	No	Standards apply at all times, including during startup, shutdown, and malfunction events.
3.6.6.2 - 3.6.6.3	Yes	
3.6.7	Yes	
3.6.8	No	Standards apply at all times, including during startup, shutdown, and malfunction events.
3.6.9 - 3.6.9.6.1.2.1	Yes	
3.6.9.6.1.2.2	No	Reserved.
3.6.9.6.1.2.3 - 3.6.9.6.1.2.4	Yes	
3.6.9.6.1.3 - 3.6.9.6.1.4	No	Reserved.

3.6.9.6.2 - 3.6.9.14	Yes	
3.6.9.15	No	Reserved.
3.6.9.16	Yes	
3.6.10	Yes	
3.7.1 - 3.7.1.2	Yes	
3.7.1.2.1 - 3.7.1.2.7	No	Reserved.
3.7.1.2.8 - 3.7.8	Yes	
3.8.1.1 – 3.8.1.2	Yes	
3.8.1.3	No	Reserved.
3.8.1.4 - 3.8.7.5	Yes	
3.9.1 - 3.9.1.4	Yes	
3.9.1.4.1	No	Reserved.
3.9.1.4.2 - 3.9.2.2.5	Yes	
3.9.2.3	No	Reserved.
3.9.2.4 - 3.9.2.4.1	Yes	
3.9.2.4.2 - 3.9.2.4.4	No	Reserved.
3.9.2.4.5 - 3.9.4	Yes	
3.9.5	Yes	
3.9.6 - 3.9.7	No	
3.9.8 - 3.9.8.3	Yes	
3.9.8.4	No	Reserved.
3.9.8.5 - 3.9.10	Yes	
3.10.1 - 3.10.1.4	Yes	
3.10.1.4.1	No	Reserved.
3.10.1.4.2 - 3.10.2.2.3	Yes	
3.10.2.2.4 - 3.10.2.2.5	No	
3.10.2.2.6 - 3.10.3.1	Yes	
3.10.3.2 - 3.10.3.4	No	Reserved.
3.10.3.5 - 3.10.3.8	Yes	
3.10.3.9	No	Reserved.
3.10.3.10 - 3.10.4.1	Yes	
3.10.4.2 - 3.10.4.5	No	
3.10.5 - 3.10.6	Yes	
3.11	No	
3.12	Yes	
3.13	Yes	
3.14	Yes	
3.15	Yes	